Page 2

Application/Control Number: 10/645,303

Art Unit: 4127

DETAILED ACTION

This communication is a first Office Action Non-Final rejection on the merits.
Claims 1-40, as originally filed, are currently pending and have been considered below.

Drawings

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "14" has been used to designate both memory of payment parking terminal and memory of portable terminal. Error repeated with character "16", "22" etc. numerous errors in the drawings please correct. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

The disclosure is objected to because of the following informalities on page 14;
line 14 and page 15; line 10 of the specification recites "Tree" which appears to be a misspelling of the word --Three--.

Page 3

Application/Control Number: 10/645,303 Art Unit: 4127

Appropriate correction is required.

- 4. The disclosure is objected to because of the following informalities on page 18; line 18 of the specification recites "t" which appears to be a misspelling of the word --to-. Appropriate correction is required.
- The claims are objected to because they include reference characters which are not enclosed within parentheses.

Reference characters corresponding to elements recited in the detailed description of the drawings and used in conjunction with the recitation of the same element or group of elements in the claims should be enclosed within parentheses so as to avoid confusion with other numbers or characters which may appear in the claims. See MPEP § 608.01(m).

6. Claims 1-40 are objected to because of the following informalities: character "28" is used to describe payment parking terminal and then also to describe portable terminal, in the drawings character "28" is used to describe the portable terminal. It is unclear as to which device the character is referring to. Appropriate correction is required.

Claim Rejections - 35 USC § 103

 The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Art Unit: 4127

8. Claims 1-4, 9-10, and 14-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fulcher et al. (6,505,774), in view of Scott Guthery: "Wireless Relay Networks" (November/December 1997) hereafter Guthery.

As per claim 1, Fulcher et al. discloses a payment parking terminal for managing use of a plurality of parking spaces (Col 18, lines 57-64; discloses that a user may choose from a plurality of spaces and the machine will issue a ticket for that space corresponding to the time and date that it is issued) comprising:

a user interface comprising input and output means for interacting with the payment parking terminal (Figure 9, character 200; discloses a color touch screen display which is the means for interfacing with the payment parking terminal);

fee collection means for collecting and associating a payment with one of the parking spaces, the payment associated with one of the parking space being parking-related data (Figure 9, characters 18, 32, 524, 31, and 22; disclose that there is a means for collecting and associating payment for the parking space and this payment is related to the space by parking related data);

wireless communication means for sending the parking-related data and receiving parking related data (Figure 9, character 508; discloses a communications device. Col 11, lines 53-61; disclose that this communications device could be a modem or a network card which could include wireless telephone or a radio link).

data storing means for storing the parking-related data of said payment parking terminal (Figure 9, character 502; discloses a hard disk drive capable of storing the data from the transactions).

Application/Control Number: 10/645,303 Art Unit: 4127

a clock for keeping time (Col 18, lines 60-61; disclose that the issued ticket has a valid date and time from this it is shown that the device has a clock and it is used to monitor the parking related information).

Fulcher et al. fails to disclose where the wireless communication is used to send and receive parking related data from another payment parking terminal and where the data storing means is used to store information from another payment parking terminal.

Guthery, which talks about two network architectures used in wireless communication of such devices as utility and parking meters, teaches that a wireless communication is used to send and receive data information from one meter to another (Page 46, col. 2; teaches that the meter reading and control is characterized by continuous low-data-rate communication with a large number of small, simple densely packed nodes). Guthery also teaches that data is stored from another meter (Page 49, teaches that Payload is the information being transmitted from one meter to another and this information is data or commands or both and that this information would have to be stored even if only for a short time before it is transmitted to another meter).

From this teaching of Guthery, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the payment parking terminal provided by Fulcher et al. with the wireless communication method taught by Guthery, for the purpose of reducing the cost of communication between the base station and each node, instead of having a more powerful transmitter and receiver for each node, the system is capable of sending the same information through a series of

Art Unit: 4127

nodes which will reduce the power consumed by the system with the power consumption reduced, the cost is also reduced.

As per claim 2, Fulcher et al. discloses wherein the wireless communication means comprises a radio transmitter and a radio receiver (Col 11, line 60; discloses that the communication means could be done using a radio link which would shown that there is a radio transmitter and a radio receiver).

As per claim 3, Fulcher et al. discloses the above-enclosed invention but fails to disclose wherein the wireless communication means further comprises a base station for initiating, managing, terminating and validating radio frequency communications among the radio transmitters and radio receivers of the payment parking terminal and at least another one of the payment parking terminals.

Guthery, which talks about two network architectures used in wireless communication of such devices as utility and parking meters, teaches a base station for initiating, managing, terminating and validating communications between multiple meters (Page 49, col. 2; teaches that there is an initiating, managing, terminating and validating of each packet that is transmitted first it has to be initiated and then validated and then managed and finally communications are terminated).

From this teaching of Guthery, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the payment parking terminal that communicates between nodes provided by the combination of Fulcher et al. and Guthery, with the wireless communication method taught by Guthery, for the purpose of reducing the cost of communication between the base station and each

Application/Control Number: 10/645,303 Art Unit: 4127

node, instead of having a more powerful transmitter and receiver for each node, the system is capable of sending the same information through a series of nodes which will reduce the power consumed by the system with the power consumption reduced, the cost is also reduced.

As per claim 4, Fulcher et al. discloses the above-enclosed invention, but fails to disclose wherein the base station initiates the radio frequency communications with another one of the payment parking terminals via a routing table.

Guthery, which talks about two network architectures used in wireless communication of such devices as utility and parking meters, teaches the base station initiates the radio frequency communications with another one of the payment parking terminals via a routing table (Page 49, Figure 6; teaches that there is a set path from on node to another and this path is tracked via Tree ID assignments which is being construed to be a routing table which is a table listing how each node on a system can communicate with another node on the system).

From this teaching of Guthery, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the payment parking terminal that communicates between nodes provided by the combination of Fulcher et al. and Guthery, with the wireless communication method taught by Guthery, for the purpose of reducing the cost of communication between the base station and each node, instead of having a more powerful transmitter and receiver for each node, the system is capable of sending the same information through a series of nodes which will

Art Unit: 4127

reduce the power consumed by the system with the power consumption reduced, the cost is also reduced.

As per claim 9, the combination of Fulcher et al. and Guthery teaches the above-enclosed invention, Fulcher et al. discloses wherein the base station initiates the radio frequency communications directly with another terminal (Col 11, line 60; discloses that the communication means could be done using a radio link which would shown that there is a radio transmitter and a radio receiver).

Fulcher et al. is silent on that other terminal being another payment parking terminal located within a predetermined communication range.

Guthery, which talks about two network architectures used in wireless communication of such devices as utility and parking meters, teaches that the terminal is another payment parking terminal located within a predetermined communication range (Page 47, col. 2, paragraph 1; teaches that there is a rule stating the maximum distance to the nearest current use, from this it is shown that the relay system is set up so that there is a predetermined range for each node in the system to communicated with the next node and if the two nodes are out of that range the information will have to pass through other nodes).

From this teaching of Guthery, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the payment parking terminal that communicates between nodes provided by the combination of Fulcher et al. and Guthery, with the wireless communication method taught by Guthery, for the purpose of reducing the cost of communication between the base station and each

Art Unit: 4127

node, instead of having a more powerful transmitter and receiver for each node, the system is capable of sending the same information through a series of nodes which will reduce the power consumed by the system with the power consumption reduced, the cost is also reduced

As per claim 10, the combination of Fulcher et al. and Guthery teaches the above-enclosed invention, Fulcher et al. discloses wherein the base station initiates the radio frequency communications directly with another terminal (Col 11, line 60; discloses that the communication means could be done using a radio link which would shown that there is a radio transmitter and a radio receiver).

Fulcher et al. is silent on wherein the base station initiates the radio frequency communications indirectly with another one of the payment parking terminals located outside the predetermined communication range via at least another one of the payment parking terminals located within the predetermined communication range.

Guthery, which talks about two network architectures used in wireless communication of such devices as utility and parking meters, teaches wherein the base station initiates the communications indirectly with another one of the payment parking terminals located outside the predetermined communication range via at least another one of the payment parking terminals located within the predetermined communication range (Page 46, col. 2, paragraph 3; teaches that the strategy called the nearest neighbor with forward progress where a node will transmit to the nearest node and then that node will transmit to the nearest node until the target node is reached).

Art Unit: 4127

From this teaching of Guthery, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the payment parking terminal that communicates between nodes provided by the combination of Fulcher et al. and Guthery, with the wireless communication method taught by Guthery, for the purpose of reducing the cost of communication between the base station and each node, instead of having a more powerful transmitter and receiver for each node, the system is capable of sending the same information through a series of nodes which will reduce the power consumed by the system with the power consumption reduced, the

As per claim 14, the combination of Fulcher et al. and Guthery teaches the above-enclosed invention, Fulcher et al. further discloses wherein the output means issues a receipt noting time and a date expiration of authorized parking associated with the payment (Col 18, lines 60-61; disclose that the issued ticket has a valid date, time and valid space that was paid for from this it is shown that the device dispenses a receipt notifying the user when the space is valid to park in and for how long).

As per claim 15, the combination of Fulcher et al. and Guthery teaches the above-enclosed invention, Fulcher et al. fails to disclose wherein the parking related data is packet based.

Guthery, which talks about two network architectures used in wireless communication of such devices as utility and parking meters, teaches wherein the parking related data is packet based (Page 47, col. 1, paragraph 1; teaches that node cost minimization also means that meter transceivers receive one packet or transmit

Art Unit: 4127

one packet at a time, from this it is shown that the information being transferred from one meter to another is done through packets of information).

From this teaching of Guthery, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the payment parking terminal that communicates between nodes provided by the combination of Fulcher et al. and Guthery, with the wireless communication method taught by Guthery, for the purpose of reducing the cost of communication between the base station and each node, instead of having a more powerful transmitter and receiver for each node, the system is capable of sending the same information through a series of nodes which will reduce the power consumed by the system with the power consumption reduced, the cost is also reduced. Since the information is being sent in packets if for some reason the information is not received or fails to send successfully only the packet would have to be sent again not the whole file.

As per claim 16, the combination of Fulcher et al. and Guthery teaches the above-enclosed invention, Fulcher et al. further discloses wherein the wireless communications means sends the parking-related data to a central management station, the central management station comprising compiling and displaying means for compiling and displaying the parking-related data (Col. 24, lines 22-37; discloses that ATM information can be displayed in a report format. Col 23, lines 60-65; discloses that this information is sent to the an offsite computer via the communications link, from this it is shown that parking-related data can be sent to the central management station and

Art Unit: 4127

it shows that, that station is capable of compiling and displaying the parking-related data).

As per claim 17, the combination of Fulcher et al. and Guthery teaches the above-enclosed invention, Fulcher et al. further discloses the payment parking terminal further comprising self-diagnostic means for performing self-diagnostic functions on the payment parking terminal and producing self-diagnostic data, the self-diagnostic data being sent to the central management station for analysis (Col. 22, lines 10-17; discloses that an offsite computer is notified if any vandalism occurs to the machine, the machine check to make sure there are no foreign objects inserted into the machine and it has shock sensors to determine if the machine is taking abuse).

As per claim 18, the combination of Fulcher et al. and Guthery teaches the above-enclosed invention, Fulcher et al. discloses that there are radio frequency communications between the payment parking terminal and another (Col 11, line 60; discloses that the communication means could be done using a radio link which would shown that there is a radio transmitter and a radio receiver. Col. 24, lines 22-37; discloses the typical information that is sent via the communications link this information including ATM transactions and credit card information, which because of its sensitive nature is old and well know to one of ordinary skill in the art at the time of the invention to be encrypted so that peoples personal information is not made available to outside sources).

Fulcher et al. fails to clearly disclose that the radio frequency communications are encrypted and decrypted by the processing means for providing security.

Art Unit: 4127

Guthery, which talks about two network architectures used in wireless communication of such devices as utility and parking meters, teaches the radio frequency communications are encrypted and decrypted by the processing means for providing security (Page 49, paragraph 8 entitled Addressee UID; teaches that each packet is assigned a specific node ID in which the specific information is intended for this information is then encrypted into the bit string for that packet of information so the receiving node will decrypt the information and receive that packet of information).

From this teaching of Guthery, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the payment parking terminal that communicates between nodes provided by the combination of Fulcher et al. and Guthery, with the wireless communication method taught by Guthery, for the purpose of reducing the cost of communication between the base station and each node, instead of having a more powerful transmitter and receiver for each node, the system is capable of sending the same information through a series of nodes which will reduce the power consumed by the system with the power consumption reduced, the cost is also reduced. Since the information has to go through several nodes to reach it target it is encrypted with it target destination so that node knows to receive the information and no one else. For security reasons it is important for this information not to be transmitted to the wrong address or potentially unwanted hands. Due to the nature of the information being transfer it would have been obvious to one of ordinary skill in the art at the time of the invention to encrypt this information, other wise it would be

Art Unit: 4127

possible for people to receive this information and steal the information of people using the system.

9. Claims 5, 19-21, 26-27, 31-37 and 39-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fulcher et al. (6,505,774), in view of Guthery, further in view of Ohran (US2001/0037371A1).

As per claim 5, the combination of Fulcher et al. and Guthery teaches the above-enclosed invention, but fails to teach wherein the parking related data stored on the storage means is mirrored onto at least another one of the payment parking terminals.

Ohran, which talks about mirroring network data to establish virtual storage area network, teaches wherein data stored on the storage means is mirrored onto at least another one of the terminals (Abstract; teaches mirroring data to provide a virtual storage area network using policing protocols and mirror engines without a physical shared storage node, this is done for redundancy if one server fails in the case of the parking meters if one parking meter fails the other meters would still be able to provide information regarding the transactions).

From this teaching of Ohran, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the payment parking terminal that communicates between nodes provided by the combination of Fulcher et al. and Guthery, with the system of mirroring data across multiple servers for the purpose of making the task of obtaining and operating a storage network cheaper and

Application/Control Number: 10/645,303 Art Unit: 4127

information is always accessible and is never lost.

easier. A storage network is useful so that valuable information such as transaction

As per claim 19, Fulcher et al. discloses a wireless communication networked parking system for managing use of a plurality of parking spaces, the parking system comprising a payment parking terminal responsible for a plurality of parking spaces (Col 18, lines 57-64; discloses that a user may choose from a plurality of spaces and the machine will issue a ticket for that space corresponding to the time and date that it is issued, Figure 9, character 508; discloses a communications device. Col 11, lines 53-61; disclose that this communications device could be a modem or a network card which could include wireless telephone or a radio link) comprising:

a user interface comprising input and output means for interacting with the payment parking terminal (Figure 9, character 200; discloses a color touch screen display which is the means for interfacing with the payment parking terminal);

fee collection means for collecting and associating a payment with one of the parking spaces, the payment associated with one of the parking space being parking-related data (Figure 9, characters 18, 32, 524, 31, and 22; disclose that there is a means for collecting and associating payment for the parking space and this payment is related to the space by parking related data);

data processing means for processing the parking-related data (Figure 9, character 6; discloses a programmable computer which is capable of processing means for processing the parking-related data):

Art Unit: 4127

wireless communication means for sending the parking-related data and receiving parking related data (Figure 9, character 508; discloses a communications device. Col 11, lines 53-61; disclose that this communications device could be a modem or a network card which could include wireless telephone or a radio link).

data storing means for storing the parking-related data of said payment parking terminal (Figure 9, character 502; discloses a hard disk drive capable of storing the data from the transactions).

a clock for keeping time (Col 18, lines 60-61; disclose that the issued ticket has a valid date and time from this it is shown that the device has a clock and it is used to monitor the parking related information).

Fulcher et al. fails to disclose where there are a plurality of payment parking terminals, and the wireless communication is used to send and receive parking related data from another payment parking terminal and where the data storing means is used to store information from another payment parking terminal. Fulcher et al. further fails to disclose where the payment parking terminals being linked together wirelessly and defining the point-to-point communication network, the parking-related data stored on each of the payment parking terminals being transmitted to and stored on, at least another one of the payment parking terminals via the point-to-point communications network.

Guthery, which talks about two network architectures used in wireless communication of such devices as utility and parking meters, teaches that a wireless communication is used to send and receive data information from one meter to another

Art Unit: 4127

(Page 46, col. 2; teaches that the meter reading and control is characterized by continuous low-data-rate communication with a large number of small, simple densely packed nodes). Guthery also teaches that data is stored from another meter (Page 49, teaches that Payload is the information being transmitted from one meter to another and this information is data or commands or both and that this information would have to be stored even if only for a short time before it is transmitted to another meter).

From this teaching of Guthery, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the payment parking terminal provided by Fulcher et al. with the wireless communication method taught by Guthery, for the purpose of reducing the cost of communication between the base station and each node, instead of having a more powerful transmitter and receiver for each node, the system is capable of sending the same information through a series of nodes which will reduce the power consumed by the system with the power consumption reduced, the cost is also reduced.

Ohran, which talks about mirroring network data to establish virtual storage area network, teaches where the payment parking terminals being linked together defining the point-to-point communication network, the data stored on each of the terminals being transmitted to and stored on, at least another one of the terminals via the point-to-point communications network (Abstract; teaches mirroring data to provide a virtual storage area network using policing protocols and mirror engines without a physical shared storage node, this is done for redundancy if one server fails in the case of the

Art Unit: 4127

parking meters the other meters would still be able to provide information regarding the transactions).

From this teaching of Ohran, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the payment parking terminal that communicates between nodes provided by the combination of Fulcher et al. and Guthery, with the system of mirroring data across multiple servers for the purpose of making the task of obtaining and operating a storage network cheaper and easier. A storage network is useful so that valuable information such as transaction information is always accessible and is never lost.

As per claim 20, the combination of Fulcher et al., Guthery and Ohran teaches the above-enclosed invention, Fulcher et al. further discloses wherein the wireless communication means comprises a radio transmitter and a radio receiver (Col 11, line 60; discloses that the communication means could be done using a radio link which would shown that there is a radio transmitter and a radio receiver).

As per claim 21, the combination of Fulcher et al., Guthery and Ohran teaches the above-enclosed invention, Fulcher et al. fails to fully disclose wherein the wireless communication means further comprises a base station for initiating, managing, terminating and validating radio frequency communications among the radio transmitters and radio receivers of the payment parking terminal and at least another one of the payment parking terminals.

Guthery, which talks about two network architectures used in wireless communication of such devices as utility and parking meters, teaches a base station for

Art Unit: 4127

initiating, managing, terminating and validating communications between multiple meters (Page 49, col. 2; teaches that there is an initiating, managing, terminating and validating of each packet that is transmitted first it has to be initiated and then validated and then managed and finally communications are terminated).

From this teaching of Guthery, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the payment parking terminal that communicates between nodes and stores information between nodes provided by the combination of Fulcher et al., Guthery and Ohran, with the wireless communication method taught by Guthery, for the purpose of reducing the cost of communication between the base station and each node, instead of having a more powerful transmitter and receiver for each node, the system is capable of sending the same information through a series of nodes which will reduce the power consumed by the system with the power consumption reduced, the cost is also reduced.

As per claim 22, the combination of Fulcher et al., Guthery and Ohran teaches the above-enclosed invention, Fulcher et al. fails to disclose wherein the base station initiates the radio frequency communications with another one of the payment parking terminals via a routing table.

Guthery, which talks about two network architectures used in wireless communication of such devices as utility and parking meters, teaches the base station initiates the radio frequency communications with another one of the payment parking terminals via a routing table (Page 49, Figure 6; teaches that there is a set path from on node to another and this path is tracked via Tree ID assignments which is being

Application/Control Number: 10/645,303 Art Unit: 4127

construed to be a routing table which is a table listing how each node on a system can communicate with another node on the system).

From this teaching of Guthery, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the payment parking terminal that communicates between nodes and stores information between nodes provided by the combination of Fulcher et al., Guthery and Ohran, with the wireless communication method taught by Guthery, for the purpose of reducing the cost of communication between the base station and each node, instead of having a more powerful transmitter and receiver for each node, the system is capable of sending the same information through a series of nodes which will reduce the power consumed by the system with the power consumption reduced, the cost is also reduced.

As per claim 26, the combination of Fulcher et al., Guthery and Ohran teaches the above-enclosed invention, Fulcher et al. discloses wherein the base station initiates the radio frequency communications directly with another terminal (Col 11, line 60; discloses that the communication means could be done using a radio link which would shown that there is a radio transmitter and a radio receiver).

Fulcher et al. is silent on that other terminal being another payment parking terminal located within a predetermined communication range.

Guthery, which talks about two network architectures used in wireless communication of such devices as utility and parking meters, teaches that the terminal is another payment parking terminal located within a predetermined communication range (Page 47, col. 2, paragraph 1; teaches that there is a rule stating the maximum

Art Unit: 4127

distance to the nearest current use, from this it is shown that the relay system is set up so that there is a predetermined range for each node in the system to communicated with the next node and if the two nodes are out of that range the information will have to pass through other nodes).

From this teaching of Guthery, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the payment parking terminal that communicates between nodes and stores information between nodes provided by the combination of Fulcher et al., Guthery and Ohran, with the wireless communication method taught by Guthery, for the purpose of reducing the cost of communication between the base station and each node, instead of having a more powerful transmitter and receiver for each node, the system is capable of sending the same information through a series of nodes which will reduce the power consumed by the system with the power consumption reduced, the cost is also reduced.

As per claim 27, the combination of Fulcher et al., Guthery and Ohran teaches the above-enclosed invention, Fulcher et al. discloses wherein the base station initiates the radio frequency communications directly with another terminal (Col 11, line 60; discloses that the communication means could be done using a radio link which would shown that there is a radio transmitter and a radio receiver).

Fulcher et al. is silent on wherein the base station initiates the radio frequency communications indirectly with another one of the payment parking terminals located outside the predetermined communication range via at least another one of the payment parking terminals located within the predetermined communication range.

Art Unit: 4127

Guthery, which talks about two network architectures used in wireless communication of such devices as utility and parking meters, teaches wherein the base station initiates the communications indirectly with another one of the payment parking terminals located outside the predetermined communication range via at least another one of the payment parking terminals located within the predetermined communication range (Page 46, col. 2, paragraph 3; teaches that the strategy called the nearest neighbor with forward progress where a node will transmit to the nearest node and then that node will transmit to the nearest node until the target node is reached).

From this teaching of Guthery, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the payment parking terminal that communicates between nodes and stores information between nodes provided by the combination of Fulcher et al., Guthery and Ohran, with the wireless communication method taught by Guthery, for the purpose of reducing the cost of communication between the base station and each node, instead of having a more powerful transmitter and receiver for each node, the system is capable of sending the same information through a series of nodes which will reduce the power consumed by the system with the power consumption reduced, the cost is also reduced.

As per claim 31, the combination of Fulcher et al., Guthery and Ohran teaches the above-enclosed invention, Fulcher et al. further discloses wherein the output means issues a receipt noting time and a date expiration of authorized parking associated with the payment (Col 18, lines 60-61; disclose that the issued ticket has a valid date, time

Art Unit: 4127

and valid space that was paid for from this it is shown that the device dispenses a receipt notifying the user when the space is valid to park in and for how long).

As per claim 32, the combination of Fulcher et al., Guthery and Ohran teaches the above-enclosed invention, Fulcher et al. fails to disclose wherein the parking related data is packet based.

Guthery, which talks about two network architectures used in wireless communication of such devices as utility and parking meters, teaches wherein the parking related data is packet based (Page 47, col. 1, paragraph 1; teaches that node cost minimization also means that meter transceivers receive one packet or transmit one packet at a time, from this it is shown that the information being transferred from one meter to another is done through packets of information).

From this teaching of Guthery, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the payment parking terminal that communicates between nodes and stores information between nodes provided by the combination of Fulcher et al., Guthery and Ohran, with the wireless communication method taught by Guthery, for the purpose of reducing the cost of communication between the base station and each node, instead of having a more powerful transmitter and receiver for each node, the system is capable of sending the same information through a series of nodes which will reduce the power consumed by the system with the power consumption reduced, the cost is also reduced. Since the information is being sent in packets if for some reason the information is not received or fails to send successfully only the packet would have to be sent again not the whole file.

Art Unit: 4127

As per claim 33, the combination of Fulcher et al., Guthery and Ohran teaches the above-enclosed invention, Fulcher et al. further discloses wherein the wireless communications means sends the parking-related data to a central management station, the central management station comprising compiling and displaying means for compiling and displaying the parking-related data (Col. 24, lines 22-37; discloses that ATM information can be displayed in a report format. Col 23, lines 60-65; discloses that this information is sent to the an offsite computer via the communications link, from this it is shown that parking-related data can be sent to the central management station and it shows that, that station is capable of compiling and displaying the parking-related data).

As per claim 34, the combination of Fulcher et al., Guthery and Ohran teaches the above-enclosed invention, Fulcher et al. further discloses the payment parking terminal further comprising self-diagnostic means for performing self-diagnostic functions on the payment parking terminal and producing self-diagnostic data, the self-diagnostic data being sent to the central management station for analysis (Col. 22, lines 10-17; discloses that an offsite computer is notified if any vandalism occurs to the machine, the machine check to make sure there are no foreign objects inserted into the machine and it has shock sensors to determine if the machine is taking abuse).

As per claim 35, the combination of Fulcher et al., Guthery and Ohran teaches the above-enclosed invention, Fulcher et al. discloses that there are radio frequency communications between the payment parking terminal and another (Col 11, line 60; discloses that the communication means could be done using a radio link which would

Art Unit: 4127

shown that there is a radio transmitter and a radio receiver. Col. 24, lines 22-37; discloses the typical information that is sent via the communications link this information including ATM transactions and credit card information, which because of its sensitive nature is old and well know to one of ordinary skill in the art at the time of the invention to be encrypted so that peoples personal information is not made available to outside sources).

Fulcher et al. fails to clearly disclose that the radio frequency communications are encrypted and decrypted by the processing means for providing security.

Guthery, which talks about two network architectures used in wireless communication of such devices as utility and parking meters, teaches the radio frequency communications are encrypted and decrypted by the processing means for providing security (Page 49, paragraph 8 entitled Addressee UID; teaches that each packet is assigned a specific node ID in which the specific information is intended for this information is then encrypted into the bit string for that packet of information so the receiving node will decrypt the information and receive that packet of information).

From this teaching of Guthery, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the payment parking terminal that communicates between nodes and stores information between nodes provided by the combination of Fulcher et al., Guthery and Ohran, with the wireless communication method taught by Guthery, for the purpose of reducing the cost of communication between the base station and each node, instead of having a more powerful transmitter and receiver for each node, the system is capable of sending the

Art Unit: 4127

same information through a series of nodes which will reduce the power consumed by the system with the power consumption reduced, the cost is also reduced. Since the information has to go through several nodes to reach it target it is encrypted with it target destination so that node knows to receive the information and no one else. For security reasons it is important for this information not to be transmitted to the wrong address or potentially unwanted hands. Due to the nature of the information being transfer it would have been obvious to one of ordinary skill in the art at the time of the invention to encrypt this information, other wise it would be possible for people to receive this information and steal the information of people using the system.

As per claim 36, the combination of Fulcher et al., Guthery and Ohran teaches the above-enclosed invention, Fulcher et al. discloses wherein the base station initiates the radio frequency communications directly with another terminal (Col 11, line 60; discloses that the communication means could be done using a radio link which would shown that there is a radio transmitter and a radio receiver).

Fulcher et al. is silent on the base stations of the payment parking terminals cooperate together for managing all radio frequency communications on the network.

Guthery, which talks about two network architectures used in wireless communication of such devices as utility and parking meters, teaches that the base stations of the payment parking terminals cooperate together for managing all communications on the network (Page 49, col. 2; teaches that the nodes which are construed to be the base stations cooperate sending and receiving information based on the unique ID set up for each node in the system. The nodes listen for data

Art Unit: 4127

transmissions and when something has their unique ID they receive the information. All of the nodes work together to pass information along and manage all of the different wireless communication signals that are being sent and received).

From this teaching of Guthery, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the payment parking terminal that communicates between nodes and stores information between nodes provided by the combination of Fulcher et al., Guthery and Ohran, with the wireless communication method taught by Guthery, for the purpose of reducing the cost of communication between the base station and each node, instead of having a more powerful transmitter and receiver for each node, the system is capable of sending the same information through a series of nodes which will reduce the power consumed by the system with the power consumption reduced, the cost is also reduced.

As per claim 37, Fulcher et al. discloses a method for implementing a wireless communication networked metered parking system for managing use of a plurality of parking spaces (Col 18, lines 57-64; discloses that a user may choose from a plurality of spaces and the machine will issue a ticket for that space corresponding to the time and date that it is issued, Figure 9, character 508; discloses a communications device. Col 11, lines 53-61; disclose that this communications device could be a modem or a network card which could include wireless telephone or a radio link), the method comprising the steps of:

 a. positioning a payment parking terminal in a vicinity of a plurality of said parking spaces, the payment parking terminal being responsible for a plurality of said parking

Art Unit: 4127

spaces (Col 18, lines 57-64; discloses that a user may choose from a plurality of spaces and the machine will issue a ticket for that space corresponding to the time and date that it is issued), each of the payment parking terminals comprising:

a user interface comprising input and output means for interacting with the payment parking terminal (Figure 9, character 200; discloses a color touch screen display which is the means for interfacing with the payment parking terminal).

fee collection means for collecting and associating a payment with one of the parking spaces, the payment associated with one of the parking spaces being parking-related data (Figure 9, characters 18, 32, 524, 31, and 22; disclose that there is a means for collecting and associating payment for the parking space and this payment is related to the space by parking related data);

data processing means for processing the parking-related data (Figure 9, character 6; discloses a programmable computer which is capable of processing means for processing the parking-related data);

wireless communication means for sending the parking-related data to at least one terminal and for receiving parking-related data from at least one terminal (Figure 9, character 508; discloses a communications device. Col 11, lines 53-61; disclose that this communications device could be a modem or a network card which could include wireless telephone or a radio link).

data storing means for storing the parking-related data of said payment parking terminal (Figure 9, character 502; discloses a hard disk drive capable of storing the data from the transactions):

Art Unit: 4127

a clock for keeping time (Col 18, lines 60-61; disclose that the issued ticket has a valid date and time from this it is shown that the device has a clock and it is used to monitor the parking related information).

Fulcher et al. fails to disclose where there are a plurality of payment parking terminals, and the wireless communication is used to send and receive parking related data from another payment parking terminal and where the data storing means is used to store information from another payment parking terminal. Fulcher et al. further fails to disclose where the payment parking terminals being linked together wirelessly, and transmitting the parking-related data stored on each of the payment parking terminals to, and stored on, at least one of the payment parking terminals via the point-to-point communication network.

Guthery, which talks about two network architectures used in wireless communication of such devices as utility and parking meters, teaches that a wireless communication is used to send and receive data information from one meter to another (Page 46, col. 2; teaches that the meter reading and control is characterized by continuous low-data-rate communication with a large number of small, simple densely packed nodes). Guthery also teaches that data is stored from another meter (Page 49, teaches that Payload is the information being transmitted from one meter to another and this information is data or commands or both and that this information would have to be stored even if only for a short time before it is transmitted to another meter).

From this teaching of Guthery, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the payment parking

Art Unit: 4127

terminal provided by Fulcher et al. with the wireless communication method taught by Guthery, for the purpose of reducing the cost of communication between the base station and each node, instead of having a more powerful transmitter and receiver for each node, the system is capable of sending the same information through a series of nodes which will reduce the power consumed by the system with the power consumption reduced, the cost is also reduced.

Ohran, which talks about mirroring network data to establish virtual storage area network, teaches where the payment parking terminals being linked together defining the point-to-point communication network, the data stored on each of the terminals being transmitted to and stored on, at least another one of the terminals via the point-to-point communications network (Abstract; teaches mirroring data to provide a virtual storage area network using policing protocols and mirror engines without a physical shared storage node, this is done for redundancy if one server fails in the case of the parking meters the other meters would still be able to provide information regarding the transactions).

From this teaching of Ohran, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the payment parking terminal that communicates between nodes provided by the combination of Fulcher et al. and Guthery, with the system of mirroring data across multiple servers for the purpose of making the task of obtaining and operating a storage network cheaper and easier. A storage network is useful so that valuable information such as transaction information is always accessible and is never lost.

Art Unit: 4127

As per claim 39, the combination of Fulcher et al., Guthery and Ohran teaches the above-enclosed invention, Fulcher et al. further discloses wherein the output means issues a receipt noting time and a date expiration of authorized parking associated with the payment via the output means of the payment parking terminal (Col 18, lines 60-61; disclose that the issued ticket has a valid date, time and valid space that was paid for from this it is shown that the device dispenses a receipt notifying the user when the space is valid to park in and for how long).

As per claim 40, the combination of Fulcher et al., Guthery and Ohran teaches the above-enclosed invention, Fulcher et al. further discloses wherein the wireless communications means sends the parking-related data to a central management station, the central management station comprising compiling and displaying means for compiling and displaying the parking-related data (Col. 24, lines 22-37; discloses that ATM information can be displayed in a report format. Col 23, lines 60-65; discloses that this information is sent to the an offsite computer via the communications link, from this it is shown that parking-related data can be sent to the central management station and it shows that, that station is capable of compiling and displaying the parking-related data).

10. Claims 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fulcher et al. (6,505,774), in view of Guthery, as applied to claim 1 above, and further in view of Dussell et al. (5,938,721).

Art Unit: 4127

As per claim 6, the combination of Fulcher et al. and Guthery teaches the above-enclosed invention, Fulcher et al. further discloses wherein the wireless communication means transmits the parking-related data to a terminal (Col. 11, lines 53-57; disclose that through the communications link the programmable computer of the parking terminal can communicate with other computers and share parking-related data).

The combination of Fulcher et al. and Guthery fail to teach where there is a portable terminal comprising: a user interface comprising input and output means for interacting with the portable terminal, wireless communication means for requesting and receiving the parking related data from the payment parking terminal, processing means for processing the parking-related data received from the payment parking terminal, data storing means for storing the parking-related data received from the payment parking terminal, and position determining means for determining a geographical position of said portable terminal.

Dussell et al., which talks about a position based personal digital assistant, teaches wherein the wireless communication means transmits the parking-related data to a portable terminal (Col. 7, line 67, col. 8, lines 1-4; teaches that a database can be maintained using the mobile computer system via a wireless communication link) comprising:

a user interface comprising input and output means for interacting with the portable terminal (Col. 4, lines 22-31; teaches that the input and output means for interacting with the portable terminal could be a keyboard, mouse, or touch sensitive

Art Unit: 4127

display, from this it is shown that the portable device can interface with the user for both inputs and outputs);

wireless communication means for requesting and receiving the parking related data from the payment parking terminal (Col. 7, line 67, col. 8, lines 1-4; teaches that a database can be maintained using the mobile computer system via a wireless communication link, from this it is shown the portable device is capable of requesting and receiving information from the payment parking terminal);

processing means for processing the parking-related data received from the payment parking terminal (Figure 1, character 21; teaches that the device has a microprocessor capable of processing the parking-related data that would be received from the payment parking terminal);

data storing means for storing the parking-related data received from the payment parking terminal (Figure 1, character 24; teaches that the device has a memory unit capable of storing the parking-related data received from the payment parking terminal); and

position determining means for determining a geographical position of said portable terminal (Figure 1, character 36; teaches that the device has a GPS processor which is intended to track the location of the mobile device).

From this teaching of Dussell et al., it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the payment parking terminal that communicates between nodes provided by the combination of Fulcher et al. and Guthery, with the communications with external devices being a

Art Unit: 4127

portable device that is capable of tracking its position as shown by Dussell et al. for the purpose of aiding the person monitoring the payment parking terminal in finding the device. Since the device shown in Fulcher et al. communicates with other computing devices wirelessly, it would be obvious to one of ordinary skill in the art at the time of the invention to include mobile units capable of retrieving information from the payment parking terminal.

As per claim 7, the combination of Fulcher et al., Guthery, and Dussell et al. teaches the above-enclosed invention, Fulcher et al. further discloses wherein the wireless communications means comprises a radio transmitter and a radio receiver for radio frequency communications between the payment parking terminal and another terminal (Figure 9, character 508; discloses a communications device. Col 11, lines 53-61; disclose that this communications device could be a modem or a network card which could include a radio link for communicating between the payment parking terminal and some other computing device).

Fulcher et al. fails to disclose the communication being with a portable terminal.

Dussell et al., which talks about a position based personal digital assistant, teaches a portable device capable of wireless communication (Col. 7, line 67, col. 8, lines 1-4; teaches that a database can be maintained using the mobile computer system via a wireless communication link, from this it is shown the portable device is capable of requesting and receiving information from the payment parking terminal).

From this teaching of Dussell et al., it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the payment

Art Unit: 4127

parking terminal that communicates between nodes provided by the combination of Fulcher et al. and Guthery, with the communications with external devices being a portable device that is capable of tracking its position as shown by Dussell et al. for the purpose of aiding the person monitoring the payment parking terminal in finding the device. Since the device shown in Fulcher et al. communicates with other computing devices wirelessly, it would be obvious to one of ordinary skill in the art at the time of the invention to include mobile units capable of retrieving information from the payment parking terminal.

As per claim 8, the combination of Fulcher et al., Guthery, and Dussell et al. teaches the above-enclosed invention, Fulcher et al. and Guthery fail to teach wherein the portable terminal further comprises direction representing means for representing a graphical display of immediate surroundings via the output means.

Dussell et al., which talks about a position based personal digital assistant, teaches wherein the portable terminal further comprises direction representing means for representing a graphical display of immediate surroundings via the output means (Col. 9, lines 46-49; teaches that upon selecting a location a map is displayed showing the users current location as well as the relative location of the item selected).

From this teaching of Dussell et al., it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the payment parking terminal that communicates between nodes provided by the combination of Fulcher et al. and Guthery, with the communications with external devices being a portable device that is capable of tracking its position as shown by Dussell et al. for the

Art Unit: 4127

purpose of aiding the person monitoring the payment parking terminal in finding the device. Since the device shown in Fulcher et al. communicates with other computing devices wirelessly, it would be obvious to one of ordinary skill in the art at the time of the invention to include mobile units capable of retrieving information from the payment parking terminal.

11. Claims 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fulcher et al. (6,505,774), in view of Guthery, as applied to claim 1 above, and further in view of Spradley, Jr. et al. (5,155,490).

As per claim 11, the combination of Fulcher et al. and Guthery teaches the above-enclosed invention, but is silent on the payment parking terminal comprising position determining means for determining a geographical position of the payment parking terminal.

Spradley, Jr. et al., which talks about geodetic surveying systems using multiple GPS base stations, teaches where fixed points comprises means for determining a geographical position of that point (Abstract; teaches that there are fixed points that operate GPS receivers in conjunction with a clock to determine the position of each fixed point location with better accuracy and also to help determine the position of mobile units also using GPS).

From this teaching of Spradley, Jr. et al., it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the payment parking terminal that communicates between nodes provided by the combination of Fulcher et al. and Guthery, with the system of using fixed point locations using GPS

Art Unit: 4127

systems taught by Spradley, Jr. et al., for the purpose of aiding in the accuracy of those systems and to help the accuracy of determining the position of mobile GPS units. From this it would be useful to have such a system to correct for the errors that could occur using a standard GPS signal.

As per claim 12, the combination of Fulcher et al. and Guthery teaches the above-enclosed invention, but is silent on wherein the position determining means is GPS based.

Spradley, Jr. et al., which talks about geodetic surveying systems using multiple GPS base stations, teaches wherein the position determining means is GPS based (Abstract; teaches that there are fixed points that operate GPS receivers in conjunction with a clock to determine the position of each fixed point location with better accuracy and also to help determine the position of mobile units also using GPS).

From this teaching of Spradley, Jr. et al., it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the payment parking terminal that communicates between nodes provided by the combination of Fulcher et al. and Guthery, with the system of using fixed point locations using GPS systems taught by Spradley, Jr. et al., for the purpose of aiding in the accuracy of those systems and to help the accuracy of determining the position of mobile GPS units. From this it would be useful to have such a system to correct for the errors that could occur using a standard GPS signal.

As per claim 13, the combination of Fulcher et al. and Guthery teaches the above-enclosed invention, but is silent on wherein the clock is GPS based.

Art Unit: 4127

Spradley, Jr. et al., which talks about geodetic surveying systems using multiple GPS base stations, teaches wherein the clock is GPS based (Abstract; teaches that there are fixed points that operate GPS receivers in conjunction with a clock to determine the position of each fixed point location with better accuracy and also to help determine the position of mobile units also using GPS).

From this teaching of Spradley, Jr. et al., it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the payment parking terminal that communicates between nodes provided by the combination of Fulcher et al. and Guthery, with the system of using fixed point locations using GPS systems taught by Spradley, Jr. et al., for the purpose of aiding in the accuracy of those systems and to help the accuracy of determining the position of mobile GPS units. From this it would be useful to have such a system to correct for the errors that could occur using a standard GPS signal. The clock is used to help correct for errors in determining the position information that is gathered from the satellite.

12. Claims 23-25 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fulcher et al. (6,505,774), in view of Guthery, further in view of Ohran (US2001/0037371A1), further in view of Dussell et al. (5,938,721).

As per claim 23, the combination of Fulcher et al., Guthery, and Ohran teaches the above-enclosed invention, Fulcher et al. further discloses wherein the wireless communication means transmits the parking-related data to a terminal (Col. 11, lines 53-57; disclose that through the communications link the programmable computer of the

Art Unit: 4127

parking terminal can communicate with other computers and share parking-related data).

The combination of Fulcher et al., Guthery, and Ohran fail to teach where there is a portable terminal comprising: a user interface comprising input and output means for interacting with the portable terminal, wireless communication means for requesting and receiving the parking related data from the payment parking terminal, processing means for processing the parking-related data received from one of the payment parking terminal, data storing means for storing the parking-related data received from the payment parking terminal, and position determining means for determining a geographical position of said portable terminal.

Dussell et al., which talks about a position based personal digital assistant, teaches wherein the wireless communication means transmits the parking-related data to a portable terminal (Col. 7, line 67, col. 8, lines 1-4; teaches that a database can be maintained using the mobile computer system via a wireless communication link) comprising:

a user interface comprising input and output means for interacting with the portable terminal (Col. 4, lines 22-31; teaches that the input and output means for interacting with the portable terminal could be a keyboard, mouse, or touch sensitive display, from this it is shown that the portable device can interface with the user for both inputs and outputs);

wireless communication means for requesting and receiving the parking related data from the payment parking terminal (Col. 7, line 67, col. 8, lines 1-4; teaches that a

Art Unit: 4127

database can be maintained using the mobile computer system via a wireless communication link, from this it is shown the portable device is capable of requesting and receiving information from the payment parking terminal);

processing means for processing the parking-related data received from the payment parking terminal (Figure 1, character 21; teaches that the device has a microprocessor capable of processing the parking-related data that would be received from the payment parking terminal);

data storing means for storing the parking-related data received from the payment parking terminal (Figure 1, character 24; teaches that the device has a memory unit capable of storing the parking-related data received from the payment parking terminal); and

position determining means for determining a geographical position of said portable terminal (Figure 1, character 36; teaches that the device has a GPS processor which is intended to track the location of the mobile device).

From this teaching of Dussell et al., it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the payment parking terminal that communicates between nodes and stores information between nodes provided by the combination of Fulcher et al., Guthery and Ohran, with the communications with external devices being a portable device that is capable of tracking its position as shown by Dussell et al. for the purpose of aiding the person monitoring the payment parking terminal in finding the device. Since the device shown in Fulcher et al. communicates with other computing devices wirelessly, it would be

Art Unit: 4127

obvious to one of ordinary skill in the art at the time of the invention to include mobile units capable of retrieving information from the payment parking terminal.

As per claim 24, the combination of Fulcher et al., Guthery, Ohran and Dussell et al. teaches the above-enclosed invention, Fulcher et al. further discloses wherein the wireless communications means comprises a radio transmitter and a radio receiver for radio frequency communications between the payment parking terminal and another terminal (Figure 9, character 508; discloses a communications device. Col 11, lines 53-61; disclose that this communications device could be a modem or a network card which could include a radio link for communicating between the payment parking terminal and some other computing device).

Fulcher et al. fails to disclose the communication being with a portable terminal.

Dussell et al., which talks about a position based personal digital assistant, teaches a portable device capable of wireless communication (Col. 7, line 67, col. 8, lines 1-4; teaches that a database can be maintained using the mobile computer system via a wireless communication link, from this it is shown the portable device is capable of requesting and receiving information from the payment parking terminal).

From this teaching of Dussell et al., it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the payment parking terminal that communicates between nodes and stores information between nodes that can be accessed by a portable device provided by the combination of Fulcher et al., Guthery, Ohran and Dussell et al., with the communications with external devices being a portable device that is capable of tracking its position as shown by

Art Unit: 4127

Dussell et al. for the purpose of aiding the person monitoring the payment parking terminal in finding the device. Since the device shown in Fulcher et al. communicates with other computing devices wirelessly, it would be obvious to one of ordinary skill in the art at the time of the invention to include mobile units capable of retrieving information from the payment parking terminal.

As per claim 25, the combination of Fulcher et al., Guthery, Ohran and Dussell et al. teaches the above-enclosed invention, Fulcher et al., Guthery, and Ohran fail to teach wherein the portable terminal further comprises direction representing means for representing a graphical display of immediate surroundings via the output means.

Dussell et al., which talks about a position based personal digital assistant, teaches wherein the portable terminal further comprises direction representing means for representing a graphical display of immediate surroundings via the output means (Col. 9, lines 46-49; teaches that upon selecting a location a map is displayed showing the users current location as well as the relative location of the item selected).

From this teaching of Dussell et al., it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the payment parking terminal that communicates between nodes and stores information between nodes that can be accessed by a portable device provided by the combination of Fulcher et al., Guthery, Ohran and Dussell et al., with the communications with external devices being a portable device that is capable of tracking its position as shown by Dussell et al. for the purpose of aiding the person monitoring the payment parking terminal in finding the device. Since the device shown in Fulcher et al. communicates

Art Unit: 4127

with other computing devices wirelessly, it would be obvious to one of ordinary skill in the art at the time of the invention to include mobile units capable of retrieving information from the payment parking terminal.

As per claim 38, the combination of Fulcher et al., Guthery, and Ohran teaches the above-enclosed invention, Fulcher et al. further discloses wherein the wireless communication means transmits the parking-related data to a terminal (Col. 11, lines 53-57; disclose that through the communications link the programmable computer of the parking terminal can communicate with other computers and share parking-related data).

The combination of Fulcher et al., Guthery, and Ohran fail to teach where there is a portable terminal comprising: a user interface comprising input and output means for interacting with the portable terminal, wireless communication means for requesting and receiving the parking related data from the payment parking terminal, processing means for processing the parking-related data received from one of the payment parking terminal, data storing means for storing the parking-related data received from the payment parking terminal, and position determining means for determining a geographical position of said portable terminal.

Dussell et al., which talks about a position based personal digital assistant, teaches wherein the wireless communication means transmits the parking-related data to a portable terminal (Col. 7, line 67, col. 8, lines 1-4; teaches that a database can be maintained using the mobile computer system via a wireless communication link) comprising:

Art Unit: 4127

a user interface comprising input and output means for interacting with the portable terminal (Col. 4, lines 22-31; teaches that the input and output means for interacting with the portable terminal could be a keyboard, mouse, or touch sensitive display, from this it is shown that the portable device can interface with the user for both inputs and outputs);

wireless communication means for requesting and receiving the parking related data from the payment parking terminal (Col. 7, line 67, col. 8, lines 1-4; teaches that a database can be maintained using the mobile computer system via a wireless communication link, from this it is shown the portable device is capable of requesting and receiving information from the payment parking terminal);

processing means for processing the parking-related data received from the payment parking terminal (Figure 1, character 21; teaches that the device has a microprocessor capable of processing the parking-related data that would be received from the payment parking terminal):

data storing means for storing the parking-related data received from the payment parking terminal (Figure 1, character 24; teaches that the device has a memory unit capable of storing the parking-related data received from the payment parking terminal); and

position determining means for determining a geographical position of said portable terminal (Figure 1, character 36; teaches that the device has a GPS processor which is intended to track the location of the mobile device).

Application/Control Number: 10/645,303 Art Unit: 4127

From this teaching of Dussell et al., it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the payment parking terminal that communicates between nodes and stores information between nodes provided by the combination of Fulcher et al., Guthery and Ohran, with the communications with external devices being a portable device that is capable of tracking its position as shown by Dussell et al. for the purpose of aiding the person monitoring the payment parking terminal in finding the device. Since the device shown in Fulcher et al. communicates with other computing devices wirelessly, it would be obvious to one of ordinary skill in the art at the time of the invention to include mobile units capable of retrieving information from the payment parking terminal.

13. Claims 28-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fulcher et al. (6,505,774), in view of Guthery, further in view of Ohran (US2001/0037371A1), further in view of Spradley, Jr. et al. (5,155,490).

As per claim 28, the combination of Fulcher et al., Guthery, and Ohran teaches the above-enclosed invention, but is silent on the payment parking terminal comprising position determining means for determining a geographical position of the payment parking terminal.

Spradley, Jr. et al., which talks about geodetic surveying systems using multiple GPS base stations, teaches where fixed points comprises means for determining a geographical position of that point (Abstract; teaches that there are fixed points that operate GPS receivers in conjunction with a clock to determine the position of each

Art Unit: 4127

fixed point location with better accuracy and also to help determine the position of mobile units also using GPS).

From this teaching of Spradley, Jr. et al., it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the payment parking terminal that communicates between nodes and stores information between nodes provided by the combination of Fulcher et al., Guthery and Ohran, with the system of using fixed point locations using GPS systems taught by Spradley, Jr. et al., for the purpose of aiding in the accuracy of those systems and to help the accuracy of determining the position of mobile GPS units. From this it would be useful to have such a system to correct for the errors that could occur using a standard GPS signal.

As per claim 29, the combination of Fulcher et al., Guthery, and Ohran teaches the above-enclosed invention, but is silent on wherein the position determining means is GPS based.

Spradley, Jr. et al., which talks about geodetic surveying systems using multiple GPS base stations, teaches wherein the position determining means is GPS based (Abstract; teaches that there are fixed points that operate GPS receivers in conjunction with a clock to determine the position of each fixed point location with better accuracy and also to help determine the position of mobile units also using GPS).

From this teaching of Spradley, Jr. et al., it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the payment parking terminal that communicates between nodes and stores information between nodes provided by the combination of Fulcher et al., Guthery and Ohran, with the

Art Unit: 4127

system of using fixed point locations using GPS systems taught by Spradley, Jr. et al., for the purpose of aiding in the accuracy of those systems and to help the accuracy of determining the position of mobile GPS units. From this it would be useful to have such a system to correct for the errors that could occur using a standard GPS signal.

As per claim 30, the combination of Fulcher et al., Guthery, and Ohran teaches the above-enclosed invention, but is silent on wherein the clock is GPS based.

Spradley, Jr. et al., which talks about geodetic surveying systems using multiple GPS base stations, teaches wherein the clock is GPS based (Abstract; teaches that there are fixed points that operate GPS receivers in conjunction with a clock to determine the position of each fixed point location with better accuracy and also to help determine the position of mobile units also using GPS).

From this teaching of Spradley, Jr. et al., it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the payment parking terminal that communicates between nodes and stores information between nodes provided by the combination of Fulcher et al., Guthery and Ohran, with the system of using fixed point locations using GPS systems taught by Spradley, Jr. et al., for the purpose of aiding in the accuracy of those systems and to help the accuracy of determining the position of mobile GPS units. From this it would be useful to have such a system to correct for the errors that could occur using a standard GPS signal. The clock is used to help correct for errors in determining the position information that is gathered from the satellite.

Application/Control Number: 10/645,303 Page 48

Art Unit: 4127

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PAUL R. FISHER whose telephone number is (571)270-5097. The examiner can normally be reached on Mon/Fri [7:30am/5pm] with first Fri off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynda Jasmin can be reached on (571) 270-3033. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

PRF

/Lynda Jasmin/ Supervisory Patent Examiner, Art Unit 4127